094E/13
Bill Property

830842

SJ Geophysics Ltd.
S.J.V. Consultants Ltd.

11762-94th Avenue,
Delta BC V4C 3R7 CANADA

Bus: (604) 582-1100
E-mail: sydv@sjgeophysics.com

Fax: (604) 589-7466
www.sjgeophysics.com

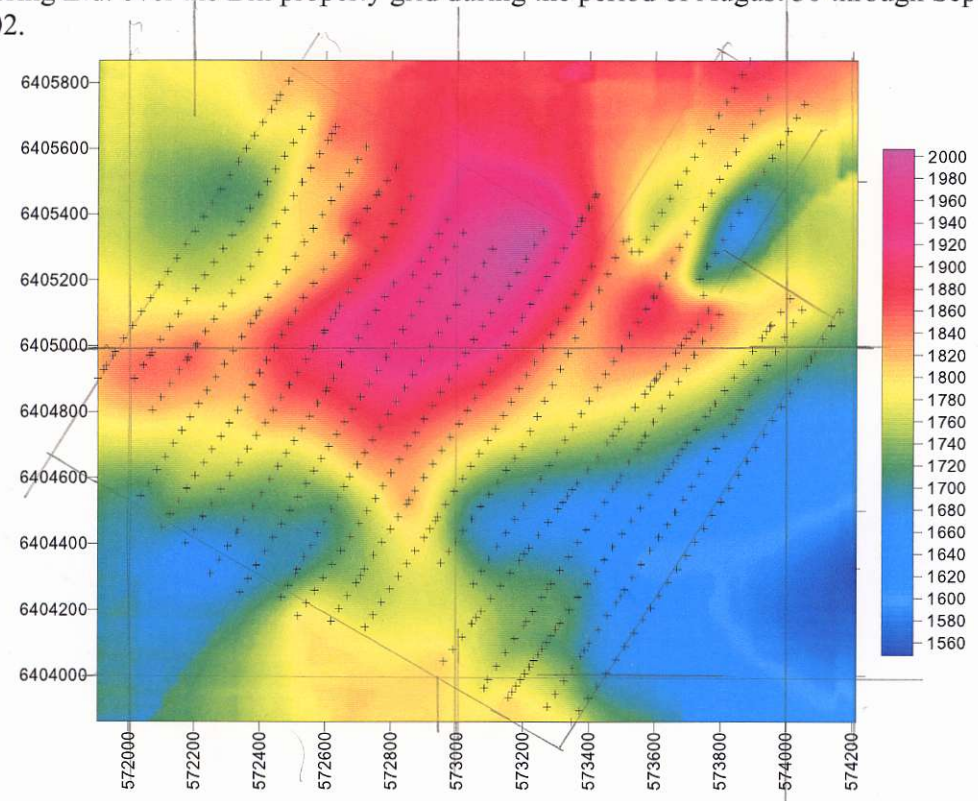
Memorandum

To: Stikine Gold Corp..
From: SJ Geophysics Ltd.

Re: IP survey results, Bill Property

Date: October 23, 2002

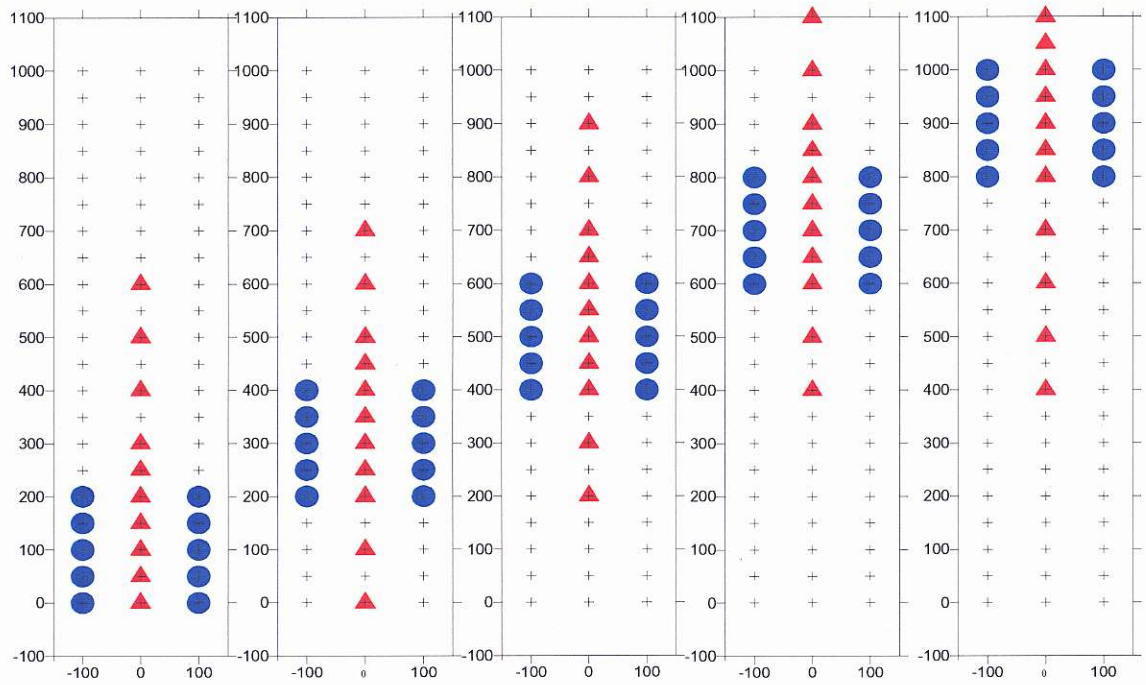
A 3D Induced Polarization survey was conducted by SJ geophysics Ltd. and Equity engineering Ltd. over the Bill property grid during the period of August 30 through September 14, 2002.



This included 2 mob-demob days, 1 standby day (weathered in at Tatoga Lake) and 15 survey production days. The crew consisted of: Syd Visser; geophysicist, Chris Basil; geophysical operator, Neil Visser; geophysical operator; Matt Dykeman; technician. Sandy Sears of Stikine Gold, Marke Baknes, Dave Caulfield and Frank Gish of Equity Engineering assisted in the gridding and surveying. The IP survey encompassed 19 lines (8100E through 9900E) at 100 meter intervals, totaling approximately 38 line kilometers. Nine of the lines (8200E though

9800E - 12.4 kms), at 200 meter intervals, served as Rx lines and the remaining 10 lines (25.6 kms) served as Tx lines. Resistivity and IP readings were measured for 10 dipoles along the RX lines with the current transmitted at 50 meter intervals from both of the adjacent lines.

The VIP 400 IP transmitter and Elrec 10 IP receiver were utilized for this survey. A 10 dipole "expanded" dipole array was deployed. At the commencement of each line the array configuration was: 50m, 50m, 50m, 50m, 50m, 50m, 100m, 100m, 100m, 100m. As the current advanced along the adjacent lines the array was shifted to a symmetrical 6 - 50's bounded by 2 - 100's which advanced forward along the Rx line as the currents advanced. Each Rx line closed off with 4 - 100's and 6 - 50's, a reversal of the starting array. In some areas of difficult contact conditions the array was adjusted to compensate. The following figure shows the currents (blue dots) and the receiver locations (red triangles) as the array moves along a line.



Location data was captured during the survey. Hand held GPS control points were gathered at line ends, the baseline and a number of intermediate points. Slopes between stations and chainage distances were merged with this data to provide locations and elevations for all of the Rx and Tx points along the grid.

Inversion

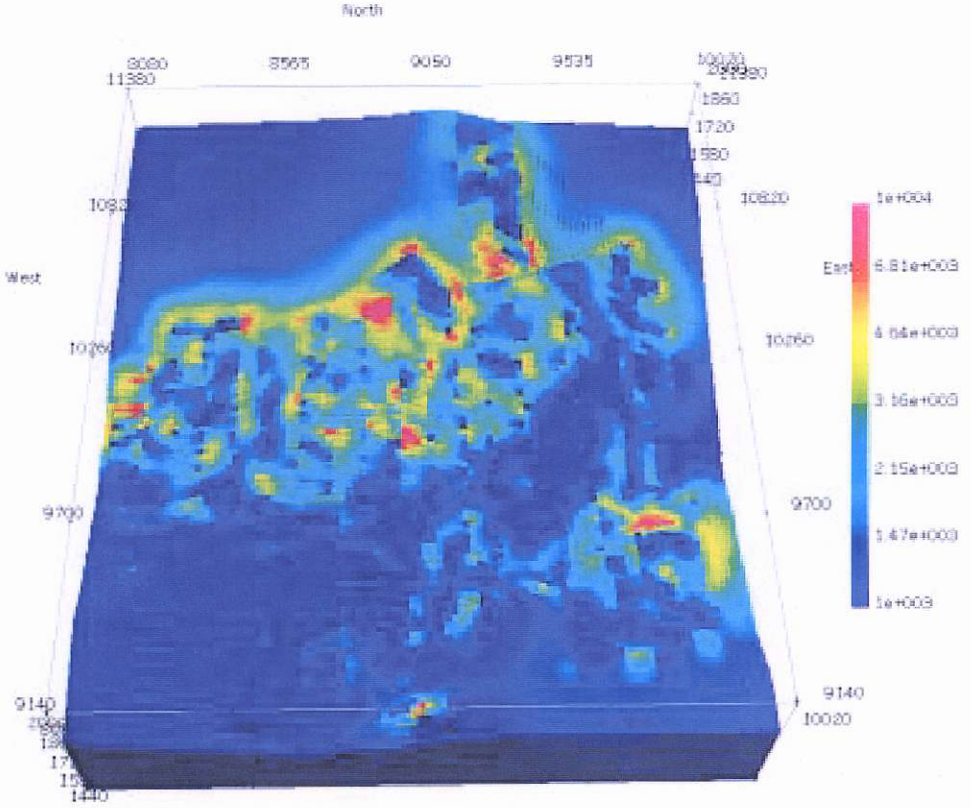
All of the IP data was collected into a database and merged with the location and topo data and inverted using the 3D UBC inversion programs modified to run on the SJV cluster. To perform an inversion the survey area must be broken up into a number of rectangular cells in the x, y and z direction. To limit the number of cells the grid was rotated into a local coordinate system that best reflected the line and station coordinates. A limitation to the UBC program is

that the current and receiving dipole locations must be at a nodal point of the cells. Due to steep topography lines that are not exactly straight the cells near the poles would have to be extremely small to accommodate the location of the poles. The maximum number of cells that can be accommodated in the inversion program (about one million) would be quickly reached using small cell sizes. An approximate solution to this problem is to move the current and receiver location to the nearest cell point. We accomplished this by calculation the resistivity from one reading and moving the poles to a cell node and then assuming the resistivity does not change over this small move and then recalculate the voltages. If the change of the voltages is over a certain percentage than the reading point will be ignored. The chargeability is assumed to remain the same within this small movement.

Additional cells have to added to the outside of the survey area to accommodate the mathematics. The number of cells are usually 3 larger cells on each side and to depth. The survey array used in this survey is a modified pole-dipole array therefore incorporating a remote current (usually called infinity). This remote current is to the east on this survey and therefore a large number of large cells have to be located to the east of the survey grid. The total inverted area also has to be rectangular thus areas not within the survey area will show up in the 3D plots.

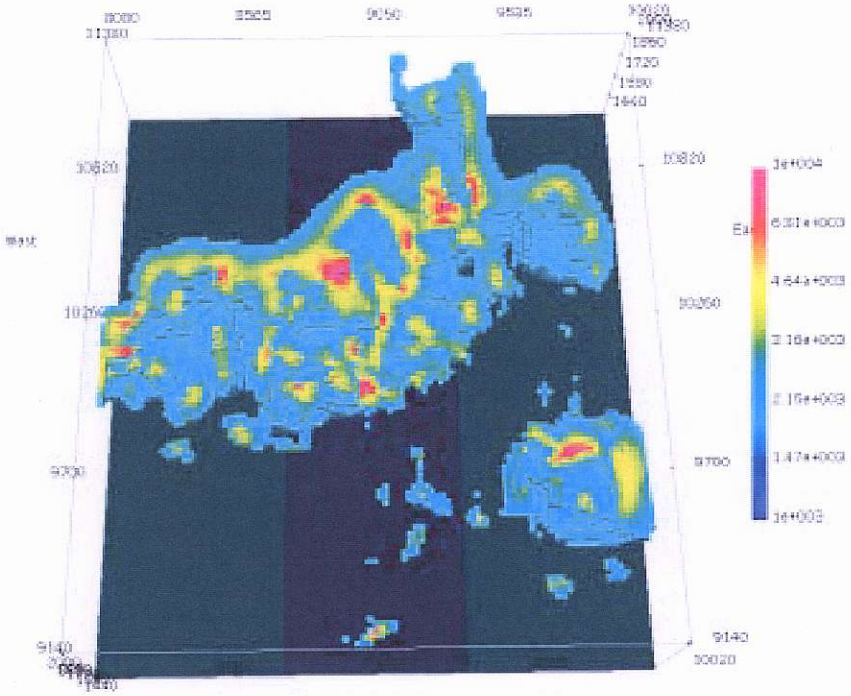
In the first inversions we limited the cell size to 10m near the poles and increased the size between the lines and to depth. To accommodate this smaller cell size we had to split the survey area in to a western grid and a eastern grid. As we came more familiar with the data it was decided to increase the size of the cells to 20m and do an inversion on the whole survey area.

The following is the resistivity over the survey area using padded cells Easting 3,19

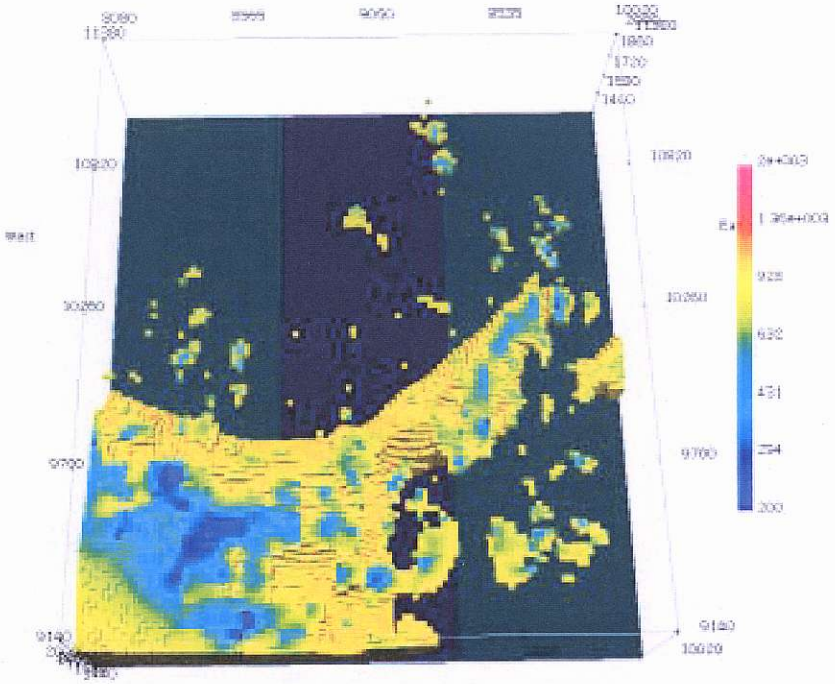


Northing 3,3 Depth 3 and Top 0.

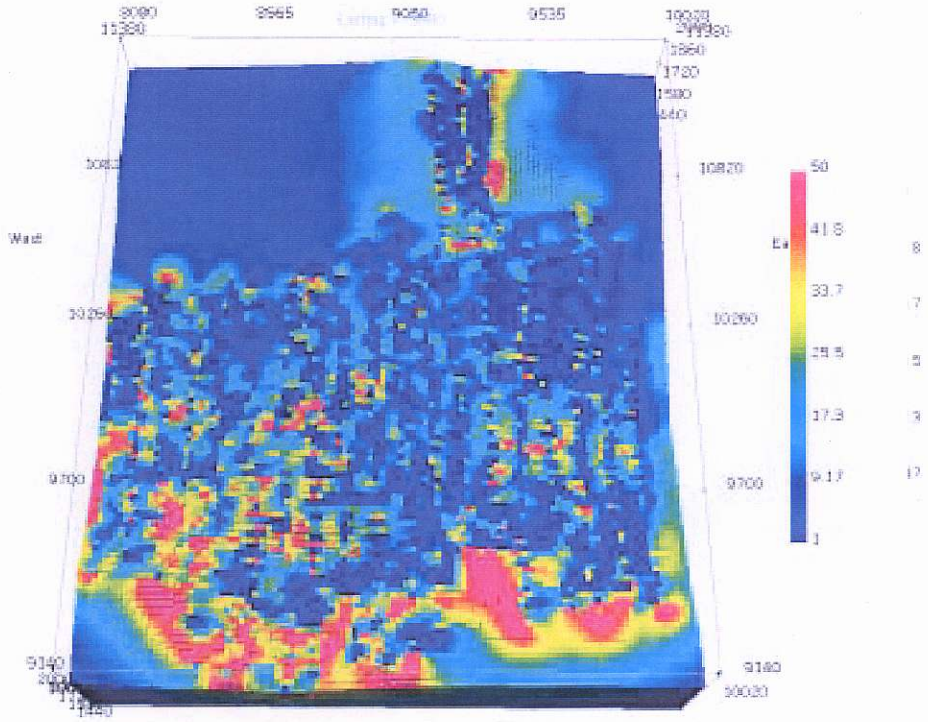
Cutoff High 10000 ohm-m and low end of 2000 ohm-m showing high resistivity to the north and south east.



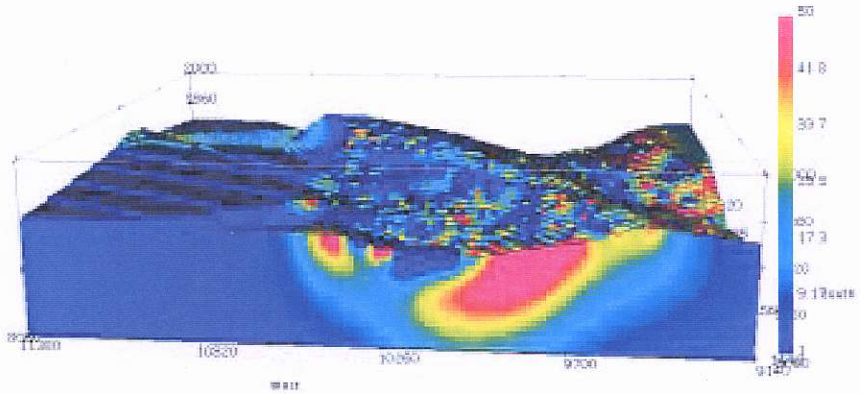
Cutoff High 1000 ohm-m and low end of 164 showing low resistivity between the above high resistivities.



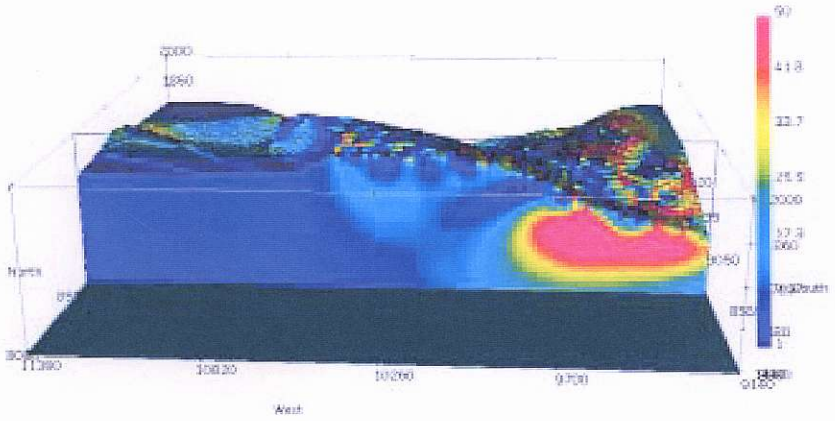
The inverted chargeability is very noisy at the surface as can be seen in the following figure.



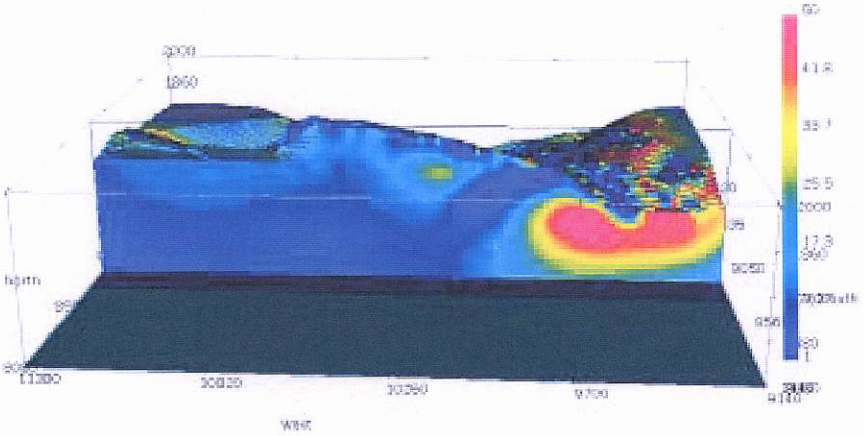
This near surface noise disappears within two cell sized as we can see when looking at the data from the west side.



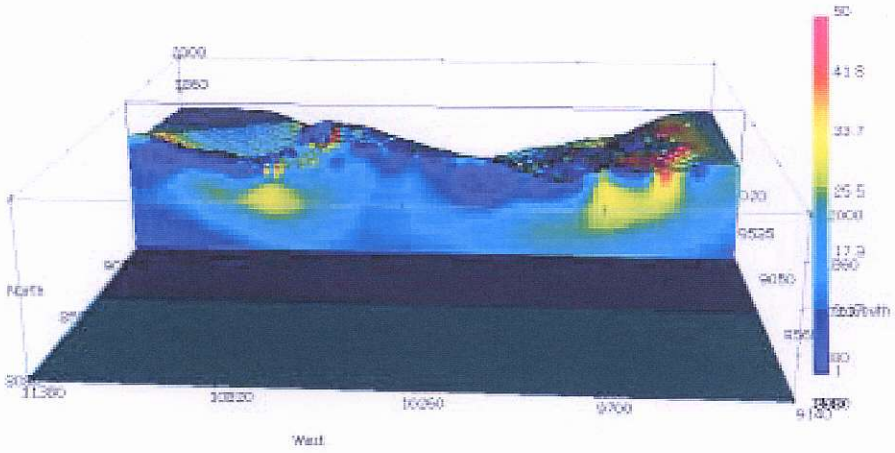
If we cut back further from the west to 8700E we can see a weak anomaly appearing in the central part of the survey area. This anomaly is much more distinctive when we use 10m cell sizes (shown later) and should be inverted paying more attention to the nearest chargeabilities.



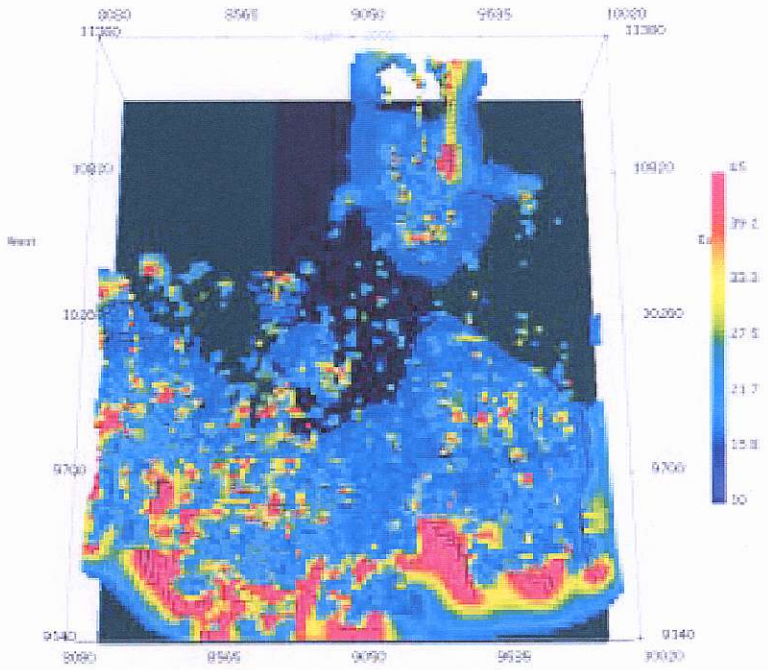
Line 8900 indicates a stronger near surface chargeability



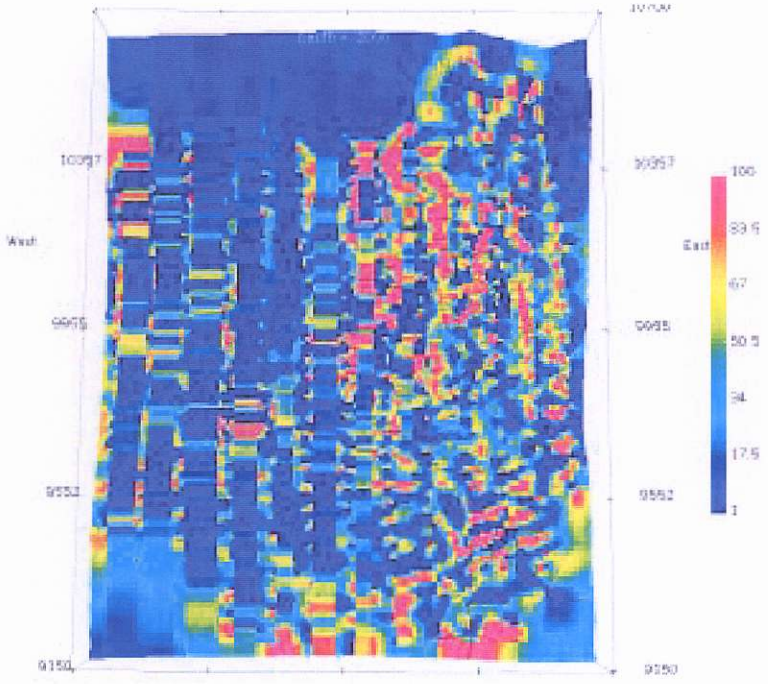
The lines that are extended over the cliff show a distinct chargeability anomaly. Because of the steep topography and poor control this anomaly should definitely be checked carefully.



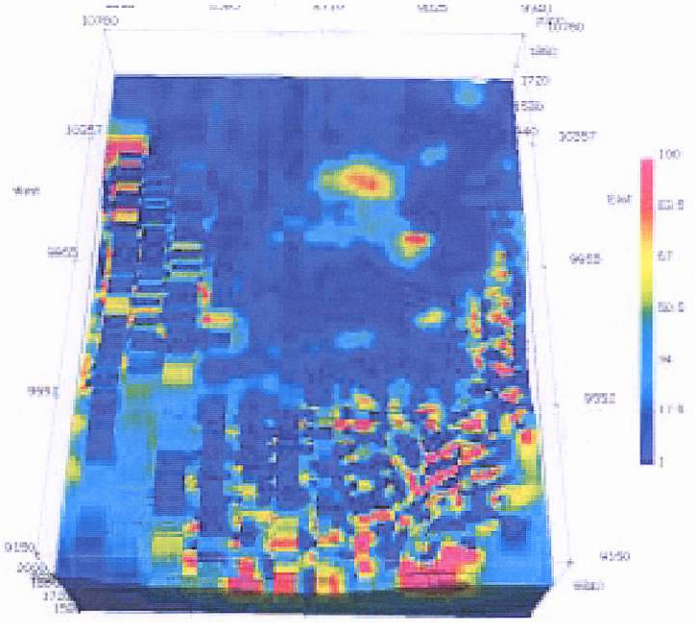
The following is using a low cutoff of 16ms which shows the central small anomaly

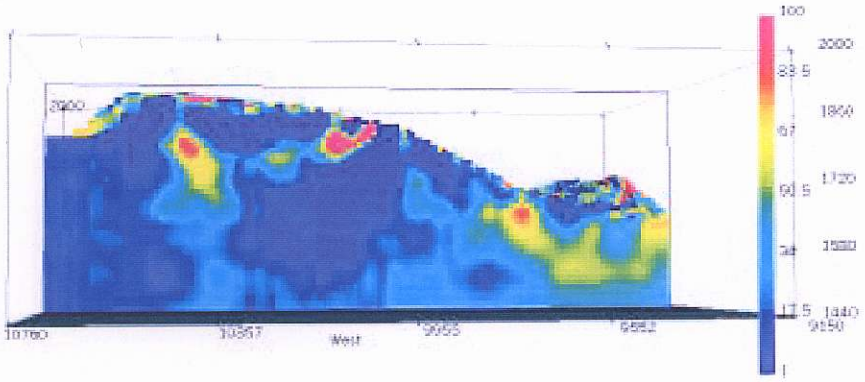


If we take the cell size near the poles down to 10m then we have to cut the grid into two sections. We also increased the cell size between the lines where possible. In the following in version I suspect that we may have increase the cell sized between the line a little to much in attempts to cut down on the cell size and this may be part of the reason for the extra near surface noise.



As we can see in the next few plots the noise disappears quickly within a few cells from the top. The 10m inversions also definitely show more detail.





Syd Visser, P.Geo.
Geophysics, Geology
S.J.V. Consultants Ltd.